



# CPUC 2018 Safety En Banc on Safety Management Systems



**March 7, 2018  
San Francisco, CA**





# CPUC 2018 Safety En Banc on Safety Management Systems

- I. **Welcome: Opening Remarks & Introduction**
- II. **Session 1 & 2 Presentations: Industry Experts, Academia, & Regulators**
- III. **Lunch**
- IV. **Session 3 Presentations: California Gas and Electric Utilities**
- V. **Public Comment, Follow-up Questions from Commissioners, and Wrap-Up**





# Welcome Opening Remarks & Introduction

## CPUC 2018 Safety En Banc on Safety Management Systems

1. **Safety Message & Housekeeping**
2. **Welcome & Opening Remarks:  
CPUC Executive Director Alice Stebbins**
3. **Introduction**

**What is the CPUC's Office of the Safety Advocate (OSA)?**

**What is a Safety Management System?**





# OSA Introduction

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**What is the CPUC's  
Office of the Safety Advocate (OSA)?**





# OSA Introduction

## CPUC Office of the Safety Advocate (OSA)

### Genesis of OSA

The creation of the CPUC's new Office of the Safety Advocate (OSA) was a **collaborative** effort:

2016:

- ❑ The CPUC's Policy & Planning Division (PPD) proposed creation of OSA as a new non-enforcement CPUC Division dedicated to advocating for safety
- ❑ The Commission requested budget approval for OSA
- ❑ Senator Hill authored SB 62, adopted unanimously by the Legislature and approved by the Governor, adding PUC 309.8, establishing and defining the Commission's Office of the Safety Advocate
- ❑ The Executive Director appointed an interim Director, characterizing OSA as a new "startup"

2017:

- ❑ Under the direction of its interim Director, OSA hired its permanent Director and began building an organization as defined by SB 62, dedicated to advocating and making improvement recommendations towards Commission and utility safety management and safety culture.





# OSA Introduction

## CPUC Office of the Safety Advocate (OSA)

SB 62 (Hill), directs OSA to, among other things:

- Recommend improvements to public utility safety management, safety culture, and infrastructure.
- Recommend improvements to the CPUC's own safety management and safety culture in its oversight of utilities (Advisory role to the Commission)
- Advocate as a party in proceedings to assist the Commission in its efforts to hold public utilities accountable for their safe operation.

### **Mission**

The Office of the Safety Advocate advocates for the continuous, cost-effective improvement of the safety management and safety performance of public utilities to prevent accidents, injuries, and to save lives.





# Safety Management System Introduction

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**“Safety Management”**

**Where to begin?**

**Safety Management System Standards!**





# Safety Management System Introduction

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**Several industries and regulators are adopting Safety Management Systems and Standards to improve safety**



AMERICAN PETROLEUM INSTITUTE

National Energy Board



Office national de l'énergie

Canada



California  
Accidental Release Prevention  
(CalARP) Program



California Accidental Release Prevention Program





# Safety Management System Introduction

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### What's in a Safety Management System?

### Examples of some common SMS elements:

- \*Leadership
- \*Stakeholder Engagement
- \*Safety Culture
- \*Risk Management
- \*Operational Controls
- \*Safety Assurance
- \*Quality Assurance
- \*Investigation/Root Cause Analysis
- \*Documentation
- \*Training
- \*Management of Change
- \*Management Review



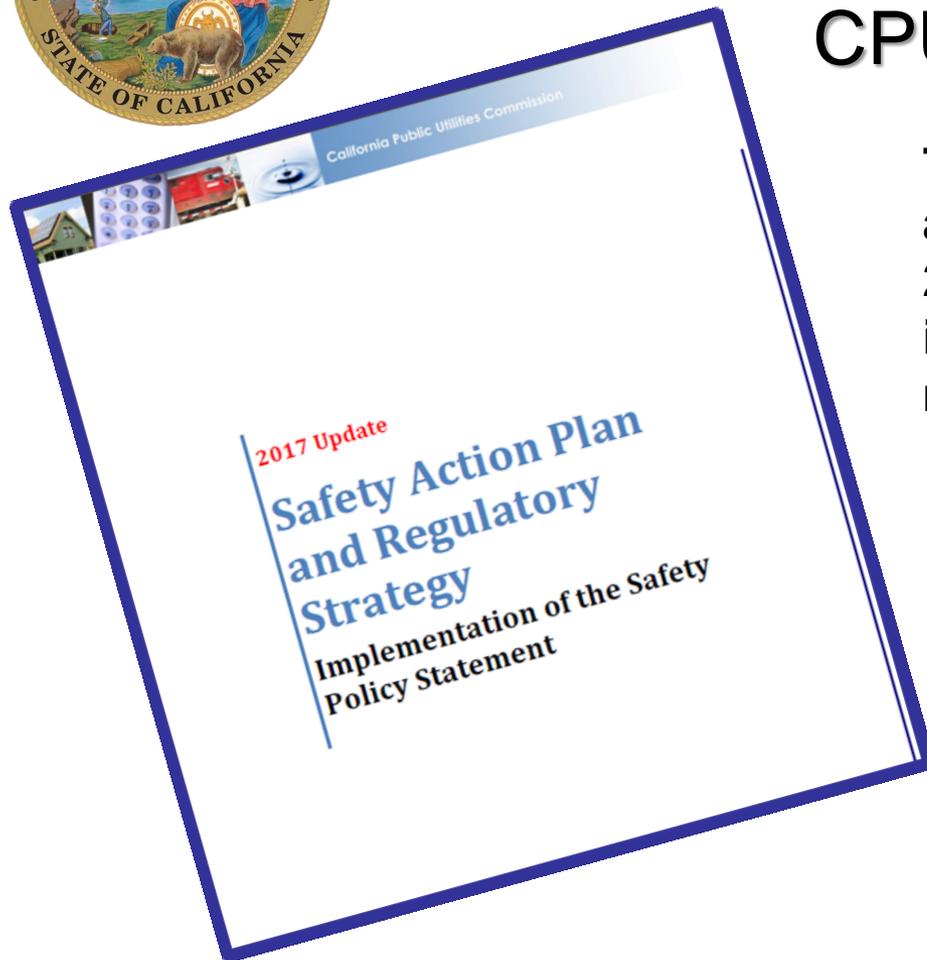


# Safety Management System Introduction

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### CPUC Example



The Commission's Safety Action Plan and Regulatory Strategy, adopted in 2015, last updated in 2017, categorizes its action items under four safety management system 'pillars':

- I. Safety Policy
- II. Safety Compliance and Enforcement
- III. Risk Management
- IV. Safety Promotion





# Safety Management System Introduction

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Federal Aviation Administration

### FAA Example

“SMS is comprised of four functional components”

### The Four SMS Components

#### Safety Policy

Establishes senior management's commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals

#### Safety Assurance

Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards

#### Safety Risk Management

Determines the need for, and adequacy of, new or revised risk controls based on the assessment of acceptable risk

#### Safety Promotion

Includes training, communication, and other actions to create a positive safety culture within all levels of the workforce





# Safety Management System Introduction

## CPUC 2018 Safety En Banc on Safety Management Systems

Discussed in today's agenda:





9:30 – 9:45 AM	Welcome and Introductory Remarks
9:45 – 11:05 AM	<p>Session 1 -- Industry Experts, Academia, &amp; Regulators Presentations:</p> <ul style="list-style-type: none"> <li>• <b>Background of Safety Management Systems and Standards</b> - Chris Parkes, OSA</li> <li>• <b>Sample Implementation of an Industry-Wide Safety Management System</b> Christopher A. Hart, former Chair, NTSB</li> <li>• <b>Paradoxes, Challenges and Opportunities in the Implementation of Safety Management Systems</b> Dr. Paul Schulman, Center for Catastrophic Risk Management, UC Berkeley</li> <li>• <b>Case Study: Pipeline Safety Management System Implementation</b> Christopher Pioli, Jacobs Consultancy</li> <li>• <b>It's not just implementation of a safety management system, it's how you go about it.</b> Megan Weichel, DNV GL</li> </ul>
11:05 – 11:15 AM	BREAK
11:15 – 12:30 PM	<p>Session 2 -- Industry Experts, Academia, &amp; Regulators Presentations (Continued):</p> <ul style="list-style-type: none"> <li>• <b>Pitfalls from Big Accidents</b> Morris Burch G2 Integrated Solutions</li> <li>• <b>Application of Safety Management System Standards to prevent Incidents through CPUC Electric Generation Standards</b> - Chris Parkes, OSA</li> <li>• <b>Management Systems and Safety Culture Advancement: One Regulator's Journey –</b> Dr. Claudine Bradley, National Energy Board, Canada</li> <li>• <b>Accidental Release Prevention Process Safety Management Systems - Incident Reductions after Implementation of Contra Costa County Industrial Safety Ordinance, including Safety Culture Requirements</b> Randall L. Sawyer, Contra Costa County</li> </ul>
12:30 – 1:25 PM	LUNCH BREAK

